

2015 AMSAT-NA Space Symposium and Annual Meeting

October 15-18, 2015

Crowne Plaza

Dayton, Ohio

Thursday October 15, 2015

8:00 am-10:00 pm AMSAT Board Meeting, **Orville Room**

Friday October 16, 2015

Morning

8:00 am-noon AMSAT Board Meeting, **Orville Room**

9:00 am Registration Opens Outside Salon A Room

9:00 am-noon Explore Dayton on your own

Afternoon

1:00-1:15 pm **AMSAT Symposium Kickoff, President's Welcome, Salon A Room**

1:15-2:50 pm Paper Session 1, University Presentations, Salon A Room

1:15-1:35 “SatNOGS – An Open Satellite Ground Station Network” P.Papadeas

1:35-2:05 “Nanosatellite and Amateur Satellite Ground Station Development Activities at the University of the Philippines” L. M. Almazan, WA6LOS; J.S. Marciano, Jr.

2:05-2:30 “Navigating Export Control Reform The Collaboration of AMSAT and Virginia Tech in Small-Sat Research” Sonya Rowe KK4NLO

2:30-2:50 “Virginia Tech and GEO, HEO, and LEO. We are Not University of Surrey YET. BUT WE ARE AMBITIOUS!” Bob McGwier, N4HY

2:50-3:05 pm Break, Salon A Room

3:05-4:45 pm Continued Presentations, Salon A Room

3:05-3:30 “Analysis of elliptical orbit perturbations with NASA's General Mission Analysis Tool” Daniel Schultz, N8FGV

3:30-3:55 “APRS Satellites, PSK31 and DTMF/Voice” Bob Bruninga WB4APR

3:55-4:20 “Actor-Based Software Framework for the Virginia Tech Ground Station” Paul U. David, KM4ICK

4:20-4:45 “Virginia Tech Ground Station Update” Zachary Leffke, KJ4QLP

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Evening

4:30-7 pm

Informal Dinner on your own

7-9 pm

AMSAT Reception, **Annapolis Room**

8-9 pm

Auction, **Annapolis Room**

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Saturday October 17, 2015

Morning

- 8:00 am Registration Opens, **Outside Salon A Room**
- 8:00-8:10 am AMSAT Symposium Welcome, Salon A Room**
- 8:10-9:40 Paper Session 2, Satellite Systems, Salon A Room**
- 8:10-8:30 “Fox-1E - Proposed IHU Firmware Features” Mike McCann, KB2GHZ
- 8:30-8:50 “A Modern Approach To Secure Commanding of an Amateur Satellite” Burns Fisher, W2BFJ
- 8:50-9:15 “Low-cost (under \$1000), high-performance (better than 1:10e12) X-band (10.5 GHz) receive terminals” Tom Clark, K3IO
- 9:15-9:40 “DSP Hardware in AMSAT P4 Geosynch Ride-share” Michael Parker, KT7D
- 9:40-9:55 Break, Salon A Room**
- 9:55-11:25 Paper Session 3, *Continued Presentations* Salon A Room**
- 9:55-10:15 “Virginia Tech Fox-1 Camera Software Update” Seth D. Hitefield, KM4KAP
- 10:15-10:40 “Ragnarok Industries CubeQuest Challenge Mission” Luigi Balarinni
- 10:40-11:05 “Mitigating Earth-To-Space Propagation Effects through Adaptive Waveform Switching” Deirdre K. Beggs, KK4YBX
- 11:05-11:25 “Phase 3-E Proposed Orbit and Attitude Control Changes” Andrew Rogers
- Lunch**
- 11:25-12:45pm On Your Own

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Afternoon

12:45-2:00 Paper Session 4, ARISS, Salon A Room

12:45-1:10 “ARISS 2015 Status Report” Frank H. Bauer, KA3HDO

1:10-1:35 “The New and Improved ARISS Proposal Process” E. Michael McCardel, KC8YLD

1:35-2:00 “ARISS Interoperable Radio System Upgrade” Lou McFadin, W5DID

2:00-2:15 Break, Salon A Room

2:15-3:35 Paper Session 5, *Continued Presentations* Salon A Room

2:15-2:40 “GNU Radio Companion Prototype for a Dual Analog/Digital Transponder System for the AMSAT GEO Mission” William C. Headley, KM4KAL

2:40-3:15 “AMSAT Engineering Update” Jerry Buxton N0JY

3:15-3:35 “Fox-1 and Fox-1C&D Environmental Testing”, Robert Davis, KF4KSS presented by Jerry Buxton, N0JY

3:35-3:45 Break, Salon A Room

3:45-5:15 pm AMSAT Annual Meeting & Awards Ceremony, Salon A Room Echolink simulcast

Evening

6:00-7:00 pm Attitude Adjustment, Salon C&D Room

6:00-7:00 pm Cash Bar

7:00-11:00 pm Banquet, Salon C&D Room

Keynote speaker: AMSAT VP-Human Space Flight Frank Bauer, KA3HDO, retired NASA Engineer presenting “Making a Difference: AMSAT’s Contribution to Navigation and Timing in HEO/GEO Space and Its Profound Impact on Earth and Space Science”

Prize drawing

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Sunday October 18, 2015

Morning

7:00-9:00 am	Area Coordinators Breakfast	Patrick Stoddard, WD9EWK	Orville Room
9:00-10:30 am	IARU Satellite Advisor Meeting	Hans Van de Groenendaal, ZS6AKV	Wilbur Room
11:00-5:00 pm	Engineering Meeting	Jerry Buxton, N0JY	Wilbur Room
11:00-1:00 pm	ARISS Meeting	Frank Bauer, KA3HDO	TBD

Afternoon

1:00-5:00 pm **Open agenda**

Monday October 19, 2015

Morning

08:45 am	Gather for the Wright Patterson Air force Museum Tour
09:00 am	Bus leaves Crowne Plaza for Museum
10:00 am	Arrive National Museum of the US Air Force, Wright Patterson AFB, Ohio
Noon	Lunch at the Museum
3:00 pm	Bus leaves the museum
4:00 pm	Bus returns to hotel